

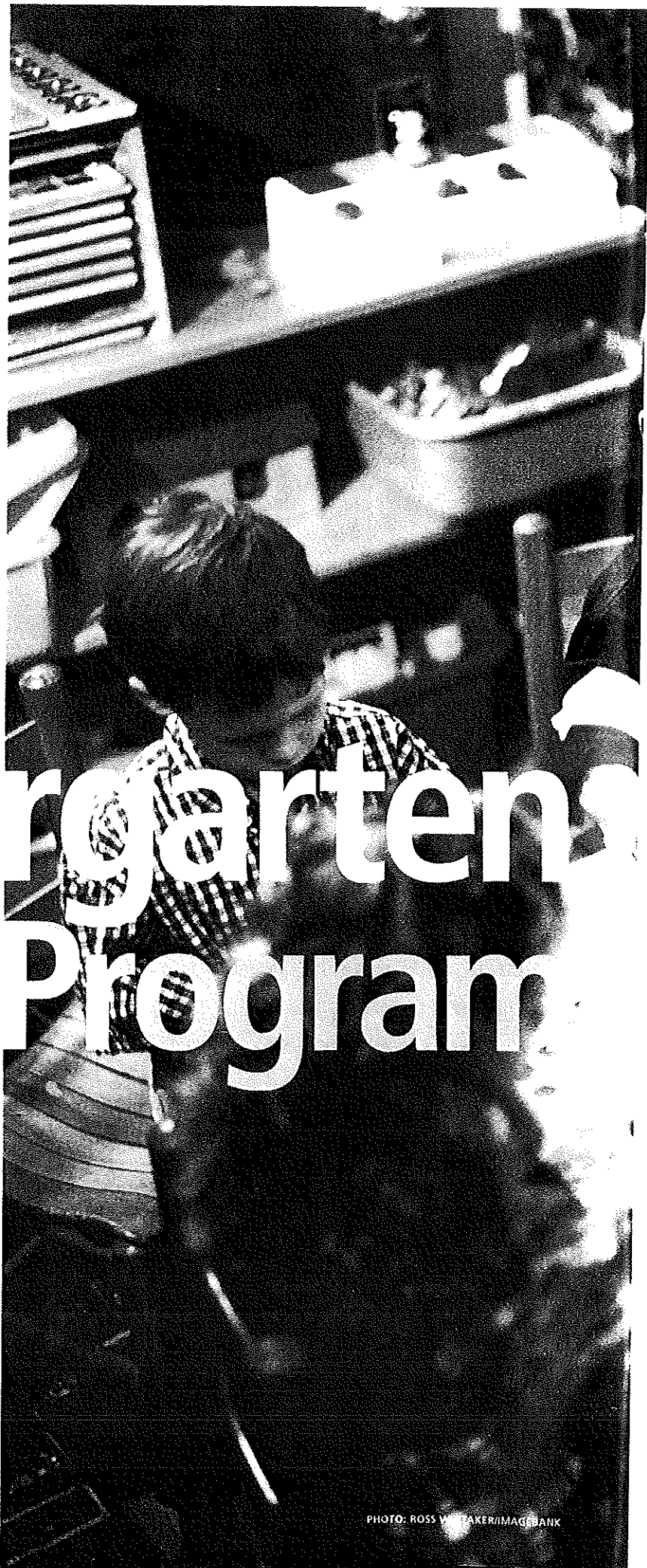
What We Know About

Pre-

ergarten Program

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A study of 240
state-funded programs
in six states shows
they are succeeding
but are capable of
accomplishing
much more.





tate-funded pre-kindergarten is a growing phenomenon in the United States. As of the 2002–3 school year, nearly three-quarters of a million children were participating in these programs, with hundreds of thousands more served in school-based Head Start programs. Two states, Georgia and Oklahoma, offer pre-kindergarten services to all four-year-olds, and Florida is finalizing a similar plan (Barnett *et al.* 2004; Clifford *et al.* in press). Yet, despite the growing popularity of state-funded pre-kindergarten programs, relatively little has been known about what these programs are actually like—who is being served, the quality of the services provided, and the characteristics of the teaching staff.

The National Center for Early Development and Learning recently conducted a comprehensive study of pre-kindergarten programs that is summarized in this article. The study addressed the ethnic, economic, and linguistic characteristics of the children and families served by these programs, their progress in helping children develop school-related academic and social skills, the characteristics of pre-kindergarten teachers, and the quality of the classroom environment.

In 2001, the National Center for Early Development and Learning (NCEDL) initiated a major study of 240 state-funded pre-kindergarten programs in six states to help remedy this lack of information and provide a base of information for other states and education agencies initiating or expanding their services for young children and their families. This is a summary of the study's major findings.

Who Is Being Served in Pre-Kindergarten?

Because most states offer pre-kindergarten to children from poor families or those at risk for learning delays, 53 percent of the children enrolled in the study's programs are from families earning less than 150 percent of the federal poverty guideline. Black, Latino, and Asian children were more likely than white children to be in pre-kindergarten classes with a high concentration of poor children, probably because of the strong linkages between poverty and ethnicity in America. A large proportion (42 percent) of the children's mothers had only a high school education or less, a characteristic also associated with poverty. According to the study, 23 percent of the pre-kindergartners spoke a language other than English at home, although about half of them also spoke some English at home, too.

Part-day and full-day classrooms differed in the population of children and families they served. Full-day classrooms had a higher proportion of children from low-income backgrounds and a higher proportion of black children as compared with part-day classrooms, which had a higher proportion of Latino children.

Who Is Teaching Them?

The study sample of 240 lead teachers revealed the following characteristics of pre-kindergarten teachers:

- Their average age was 42 years and 98 percent were female;
- 62 percent were white, 17 percent

black, 10 percent Latino, 3 percent Asian, and 8 percent mixed or other races;

- 16 percent held no formal degree past high school, while 15 percent held two-year degrees, 51 percent held bachelor's degrees and state certification to teach four-year-olds, and 30 percent held master's or higher degrees;

- 23 percent had Child Development Associate credentials;

- 100 percent spoke English, 27 percent spoke some Spanish, and 4 percent spoke some other language;

- The average hourly wage was \$19.23, while 19 percent earned less than \$10 per hour; and

- They worked 37 hours per week on average and 10.6 months per year.

Unlike K-12 teachers, teachers in early childhood programs in the past often lacked a bachelor's degree, but that is changing as studies of preschool programs show a positive association between higher levels of teacher education and classroom quality. However, there is still variation. In public schools, about 81 percent of pre-kindergarten teachers had a bachelor's degree or higher, compared to only 57 percent of teachers in non-public school settings. Black and Latino teachers were somewhat less likely to have a degree than white teachers. In addition, classrooms in which the teacher did not have a degree tended to have a higher proportion of children from low-income backgrounds.

It appears that the children most in need of high-quality early childhood experiences are being taught by less qualified teachers. Although this is true for all levels of public education, it is particularly distressing to find this in pre-kindergarten programs that are specifically designed for at-risk children. It is certainly possible that these differences may contribute to the persistent gaps in achievement that are evident in children entering kindergarten.

While teacher salaries varied widely, from \$5.21 to \$58.25 per hour, overall they are still well below typical public school salaries. Salaries of teachers in public schools, where teachers were

most likely to have a college degree, were much higher (about \$27 an hour) than in non-school settings (about \$13 an hour).

The population of pre-kindergarten teachers is relatively representative of the U.S. population in terms of race and ethnicity, but not nearly as diverse as the population of children in the programs. While 44 percent of children were identified as either black or Latino, only 27 percent of teachers so identified themselves.

What About Program Quality?

Classroom quality can be thought of in two ways: *structural quality* and *process quality*. Structural quality refers to factors such as class size, teacher and administrator training, length of the day and year, use of a standard curriculum, and availability of supplementary services. Process quality looks at the actual opportunities and experiences children have on a day-to-day basis in the classroom. While many preschool programs in the study had good structural quality, they lagged behind in process quality.

Structural Quality

The average class size was 18, with an adult-to-child ratio of 1-to-8, indicating that most classes met generally accepted standards. Only 4 percent indicated that they had no formal curriculum. In addition, at least 80 percent of the programs provided services for children with special needs, conducted developmental assessments of children, and provided meals. More than half offered parenting education or family literacy programs, transportation for children, and health care or social services (sometimes offered cooperatively with other agencies).

Roughly half of pre-kindergarten programs studied operated for 15 or fewer hours per week. Almost all operated four or five days per week for an average of five hours per day. Although part-day programs may complicate the lives of children and their working parents, most of the programs (60 percent) reported no after-school or extended-care options.

Process Quality

Several other studies in the early childhood field have indicated that good structural quality is associated with higher levels of process quality. However, the NCEDL researchers were surprised to discover that the observed process quality was lower than would be anticipated, given the relatively high structural quality found in the study. The average score of 3.86 on the Early Childhood Environment Rating Scale-Revised (ECERS-R) was lower than what has been found in other large-scale studies of early childhood programs. On the second measure of classroom quality used by the study, the Classroom Assessment Scoring System (CLASS), the scores were also lower than expected, especially for instructional climate.

Low instructional climate scores indicate that pre-kindergarten teachers do not typically engage in focused instruction that uses a variety of methods to engage children, nor do they have many extended discussions that encourage children to hypothesize, predict, and problem-solve.

One possible reason for the lower quality scores is that this study included a large number of part-day programs, in which routine activities (arrival/departure, snacks/meals) can quickly absorb a great deal of time, leaving less for activities in learning centers or small-group teaching activities.

What Are the Children Learning?

If the purpose of state-initiated pre-kindergarten programs is to increase school-related academic and social skills for children entering kindergarten, they appear to be successful. In the fall and spring, randomly selected four-year-olds who spoke English well enough to be assessed were given several standardized tests. Given that many of these pre-kindergarten programs targeted children who were at-risk for school difficulties, it was not surprising that their abilities to understand and use words were well below the national average in the fall, and their early math scores also were somewhat below average.

However, on standardized measures of language and math, the pre-kindergarten children made small but meaningful gains from the fall to the spring. Most of these children from low-income families had likely been losing ground each year, academically. Their pre-kindergarten experiences appeared to have stopped children's academic declines and even helped them start to catch up with their peers.

What Does It All Mean?

Although much more detailed information will become available as data analyses are completed, the preliminary findings are encouraging. But they also show that there is much room for improvement.

Compared to other preschool settings, pre-kindergarten programs are maintaining relatively high standards. But they still have many teachers without college degrees who are being paid

substantially less than public school teachers. While class size and teacher-child ratios are within the acceptable range, day-to-day process quality is much lower than expected.

These findings lead to the conclusion that specific efforts on the part of state and local officials are needed to ensure that best practices take place in pre-kindergarten classrooms. Principals

FOR MORE INFORMATION

This study was conducted by the National Center for Early Development and Learning, supported by the Educational Research and Development Center Program administered by the Institute of Education Sciences, U.S. Department of Education.

More detailed information will become available as data analyses are completed. For information on these analyses, visit www.ncedl.org or www.fpg.unc.edu/~ncedl.

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and program directors, through adequate supervision of staff and the provision of meaningful technical assistance, hold the keys to helping relatively new pre-kindergarten programs achieve the full potential they have for helping young children most in need achieve their full potential. ☐

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WEB RESOURCES

The National Center for Early Development and Learning (NCEDL) offers a wide range of research-based information on early childhood education, including a preliminary report on an 11-state study of pre-kindergarten and early education programs. www.ncedl.org

Pre-K Now, formerly a part of the Trust for Early Education, advocates for high-quality public pre-kindergarten for all three- and four-year-olds. www.preknow.org

Although the ERIC Clearinghouse on Elementary and Early Childhood Education is now closed, many of its online publications and resources are available on the Clearinghouse for Early Education and Parenting Web site. <http://ceep.crc.uiuc.edu/>

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